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(54) **DNA mutagenesis by random fragmentation and reassembly for antibody production**

(57) The present invention provides a population of polynucleotides resulting from shuffling sequences from substrate polynucleotides encoding antibody chains, whereby the population of polynucleotides comprises recombinant polynucleotides encoding antibody chains having different combinations of heavy chain CDRs and/or light chain CDRs than are encoded by the substrate polynucleotides. Such a population of polynucleotides may be employed to provide an antibody display library.

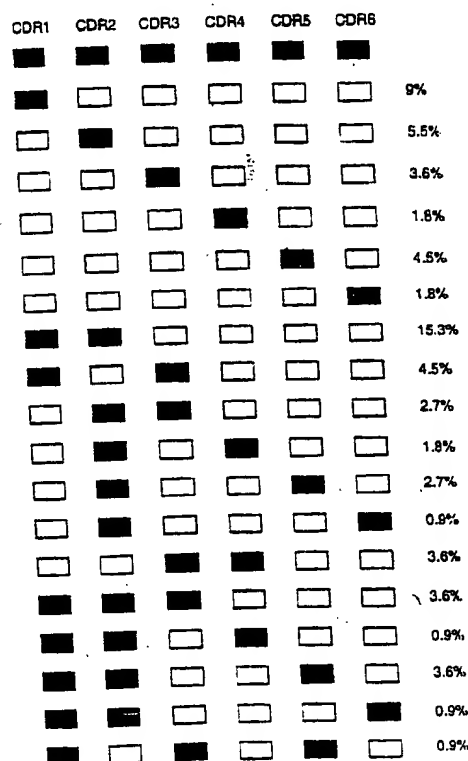


Figure 7

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## EUROPEAN SEARCH REPORT

Application Number  
EP 01 10 0962

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A	R.I. NEAR: "Gene conversion of immunoglobulin variable regions in mutagenesis cassettes by replacement PCR mutagenesis" BIOTECHNIQUES, vol. 12, no. 1, 1992, pages 88-97, XP002090391 NATICK, MA, US * the whole document *		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 March 2001	Examiner Hornig, H
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family corresponding document			

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# EUROPEAN SEARCH REPORT

Application Number  
EP 01 10 0962

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<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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